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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,465	01/23/2002	Toshihiko Yokoyama	02975.000015	6428

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EXAMINER

SHENG, TOM V

ART UNIT PAPER NUMBER

2673

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/052,465

Applicant(s)

YOKOYAMA ET AL.

Examiner

Tom V Sheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 10 and 11 is/are allowed.
- 6) ☒ Claim(s) 6, 8, 9, 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 6, 8, 9 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding these claims, the disclosure, when filed, does not fairly contain information regarding the claimed features, "wherein the signal processing circuit corrects the image signal such that the brightness irregularity, which cannot be corrected by the gradient film, is reduced or cancelled", of independent claims 6 and 12.

The disclosure, specifically the description on page 15, paragraph 58, cites "When gradient membranes used ... color unevenness cannot be completely corrected ... color unevenness correction processing must be electrically performed in the horizontal and vertical directions". That is, when color unevenness cannot be completely corrected, correction processing is needed. This does not read on or render obvious of correcting image signal such that brightness irregularity, which cannot be corrected by the gradient film, is reduced or cancelled (by correcting the image signal). Accordingly, the original

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disclosure does not fairly convey to one of ordinary skill in the art that the inventor(s) had in their possession the above underlined features.

***Allowable Subject Matter***

3. Claims 1-5 and 10-11 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter: none of the prior arts of record teaches, among other limitations, the specific limitations of “a color synthesizing optical element, comprising a dichroic film including a gradient film in which its thickness varies in a substantially horizontal direction ...” and “a signal processing circuit which corrects the image signal such that brightness irregularity in a substantially vertical direction of an image projected by the projection optical system is reduced or cancelled” of claim 1; “a color synthesizing optical element comprising a dichroic film including a gradient film in which its thickness varies in the first direction ...” and “a signal processing circuit which corrects the image signal such that brightness irregularity in the second direction of the image is reduced or cancelled” of claim 5; “a color synthesizing optical element, comprising a dichroic film including a gradient film in which its refractive index varies in a substantially horizontal direction ...” and “a signal processing circuit which corrects the image signal such that brightness irregularity in a substantially vertical direction of an image projected by the projection optical system is reduced or cancelled” of claim 10; and “a color synthesizing optical element comprising a dichroic film including a gradient film in which its refractive index varies in the first direction ...” and “a signal processing circuit which corrects the image

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signal such that brightness irregularity in the second direction of the image is reduced or cancelled" of claim 11. Claims 2-4 depend on claim 1.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V Sheng whose telephone number is (703) 305-6708. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Sheng  
February 25, 2005

  
Amare Mengistu  
Primary Examiner